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**Rosa26<sup>EN</sup>-CFP-bGpA-Neo - ES Cell Line RES2562****ESC Line Information**

<b>Cell Line Name:</b>	Rosa26 <sup>EN</sup> -CFP-bGpA-Neo
<b>Parental Cell Line:</b>	TL-1 / Rosa26 <sup>LCA</sup> clone 5B9
<b>Background Strain:</b>	129
<b>Culturing Protocol:</b>	<a href="#">std_mesc_culture.doc</a>
<b>Description:</b>	This ES cell line contains CFP (Cerulean) inserted into a Rosa26 <sup>LCA</sup> allele by recombinase mediated cassette exchange. These cells were used to identify an optimal combination of regulatory elements for fluorescent protein expression from single a genomic copy.

**Genetic Alterations****1) RMCE Targeted Mutagenesis**

<b>Type of Allele</b>	Cassette Acceptor
<b>Targeted Gene</b>	gene trap ROSA 26, Philippe Soriano (Gt(ROSA)26Sor - <a href="#">NCBI GeneID:14910</a> )
<b>Targeted Allele</b>	targeted mutation 1 (Rosa26 <sup>tm1(LCA)</sup> - <a href="#">MGI:104735</a> )
<b>Description of Targeting Vector</b>	The Rosa 26 cassette acceptor allele was created by replacing a 5.165 kb region of this gene containing exon 1 with a floxed tk-neo cassette, a puromycin-delta-thymidine kinase fusion gene driven by the mouse phosphoglycerol kinase promoter (pU-deltaTK) and a neomycin resistant gene driven by the bacterial EM7 promoter (EM7neo) flanked by minimal (34 bp) tandemly oriented lox71 and lox2272 sites.


<b>Targeting Vector Genbank File</b>	<a href="#">pRosa26.LCA.gb</a>
<b>Recombinase-Mediated Cassette Exchange Stage</b>	
<b>Type of Allele:</b>	Gene Replacement
<b>Exchanged Cassette Gene</b>	Cerulean Fluorescent Protein (CFP)
<b>Exchanged Cassette Allele Name</b>	Rosa26 <sup>CFP</sup>
<b>Description of Exchange Vector</b>	not available
<b>Exchange Vector Genbank File:</b>	<a href="#">pl451.en.cfp.bgbpa.neo.gb</a>

Citations	PubMedID	Citation
	<a href="#">21324933</a>	<a href="#">Quantification of factors influencing fluorescent protein expression using RMCE to generate an allelic series in the ROSA26 locus in mice.</a> (2011) <i>Dis Model Mech</i> 4: 537-47 (Added 2012-09-24 16:36:23.369844)


**Associated Images**

<b>Image 1</b>	<b>Description:</b> A cyan (Cerulean) fluorescent protein gene was placed under the control of the Rosa 26 gene locus. The exchange plasmid also contains a 51 bp translational enhancer (5'
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**Access Status**

 This resource is publicly viewable.

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Primary contributor: [Magnuson Lab](#)  
Co-contributed by:  
• [BCBC Mouse / ES Cell Core](#)

**Resource Tags**

embryonic, es, esc, mESC Core, RMCE, Rosa26, Rosa26<sup>EN</sup>-CFP-bGpA-Neo, stem, TL1 Rosa26<sup>LCA</sup> clone 5B9

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**Resource History & Actions**

Approved on Nov 25, 2009  
Last modified on Mar 04, 2011

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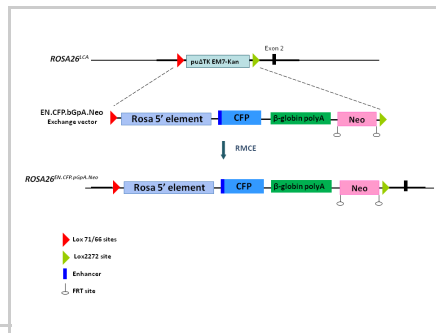
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Data courtesy of [dkCOIN](#). Only public resources are displayed.



leader sequence from *Xenopus* beta-globin gene), a Kozak sequence upstream of the start codon and a polyA site from rabbit beta globin gene.

**Reference:**  
21324933

## Repositories

**Magnuson Lab**

*Out of stock*

**Stock #:** VUMC

**Availability Notes:** *Not provided*

## Contact Information

**Preferred Contact**

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## Associated Publications

*No publications associated*

## Comments

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